



# Mecheleciu

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Washington, D. C.

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NOVEMBER, 1946

## THETA TAU HONORS F. A. HOWARD

Mr. Frank A. Howard was initiated as an honorary member of Gamma Beta, the George Washington Chapter of Theta Tau, professional engineering fraternity, on October 19th.

Mr. Howard was born in Danville, Ill., on Jan. 5, 1890. He was graduated from George Washington University in 1911 with a Bachelor of Science in Mechanical Engineering. From 1911 until 1914 he attended the School of Law at George Washington University, graduating with an L.L.B. degree. While attending law school he was employed by the U. S. Government as an examiner with the Patent Office. After obtaining his law degree, Mr. Howard was employed by a local law firm. Since 1919, while associated with the Standard Oil Company of New Jersey, Mr. Howard has been called upon to perform many varied duties, acting as an engineer and a legal advisor, both in the States and abroad.

Mr. Howard told the following story to show the difference between the ethics of the European and the American engineering professions: While reviewing a contract with a German oil company he came upon one phrase which stated that "none of the secrets of oil processing should be revealed to any other organization." Another phrase further on in the contract stated that "in the event any of the secrets were made available to another organization there would be a \$200,000 obligation." Mr. Howard stated that he promptly informed the officers of the corporation that they could have one of the phrases but not both.

Mr. Howard has held the following positions while associated with the Standard Oil Company, from which he retired last year:

## DEAN FEIKER URGES JOINING SOCIETIES

### CALENDER

November	
6	Society meetings
13	Sigma Tau - long
20	Theta Tau - long
27	Engineer's Council
December	
4	Society meetings
11	Theta Tau
	Sigma Tau
17	Engineer's Council
23	Christmas recess
January	
8	Society meetings
15	Engineer's Council
29	Theta Tau
30	Sigma Tau
February	
5	Engineer's Council
12	ENGINEER'S MIXER
15	ENGINEER'S BALL
19	Sigma Tau - long
26	Theta Tau - long
March	
5	Society meetings
12	Theta Tau
19	Engineer's Council
26	Theta Tau
	Sigma Tau
April	
2	Society meetings
9	Engineer's Council
16	Theta Tau
23	Sigma Tau
30	Theta Tau
May	
7	Society elections
10	ENGINEER'S BANQUET
12	Engineer's Council

### "LEARN PEOPLE" STATES HEAD

Dean Frederick M. Feiker, speaking at the engineer's mixer, stated, "Engineering students have two purposes while at school: learning people and learning a profession." The engineering societies, in keeping with this dual purpose provide 'fun at your work' programs to meet individual tastes in the Mechanical, Civil, or Electrical engineering fields. Meetings give each student a chance to personally meet the leaders in his chosen profession. At the same time they enable him to better understand the actualities of his profession.

"Every young engineer who looks forward to a career of accomplishment should join his fellows to gain their aid and fellowship and ideals and to share in the kind of cooperation among engineers which underlies progress for the individual and for the industry," the Dean added.


Membership is still open in these societies, and notices of current meetings will be posted on the bulletin boards.

### SIGMA TAU COACHING

Continuing a practice begun several years ago, the members of Sigma Tau, Honorary Engineering Fraternity, will be glad to give individual tutoring to those who desire it.

Please drop a note, addressed to Sigma Tau, in the Engineering Office, giving your name, address, phone, and subject interested in. The member assigned will contact you and hours will be arranged.

SUPPORT YOUR  
COMMUNITY CHEST



# Mecheleciv STAFF

The MECHELECIV is published monthly by the undergraduates of the School of Engineering on the George Washington University. Mail may be addressed, c/o Office of the Dean, School of Engineering. Circulation 1750.

Editor-in-chief...Marjorie Rhodes  
News Editor...Bernadine Dunfee  
Circ. Manager...John Slothover  
Business Manager...Jim Le Croy

With the expansion of the School of Engineering the MECHELECIV has similarly enlarged. The circulation has increased from 1200 to 1750. The paper has grown from four to six pages. The MECHELECIV staff, sparked by new ideas and enthusiasm, will make each issue worthwhile looking for. Support your paper; suggestions and contributions are welcome. You will find a convenient box adjacent to Dean Feiker's office.

## "POEM"

By George Clark

Hello, Mother dear,  
I'm writing from school  
(I should be working  
With my Li'l slide rule)

Slaving in the daytime,  
And studying nights,  
Doesn't cost a centime  
With the G.I. Bill of Rights

Uncle Sammy pays my board;  
Playing poker pays the rent.  
My pay check buys me aspirin—  
I'm not broke, but badly bent!

When I'm not busy with my work  
Or slide rule calculation,  
I worry 'bout the cost of things  
And sweat out our inflation.

I try to sleep at night—in vain—  
Thinking of the future near,  
And wonder if it's worth the strain  
To be a doggone engineer!

P.S. Mom, could you send me ten—  
Till you know when?

## EDITORIAL

With the tremendous influx of new students in the Engineering School, the picture of a student earnestly struggling to gain an engineering education becomes an infinitely complex one. The student's future prospects, as Dr. Marvin so effectively put over at the recent Engineer's Mixer, are somewhat hazy. Too much emphasis cannot be placed on the basic engineering curricula: mathematics, sciences, and humanities. The required progress in the first two can be achieved through individual application and study, but it is here at G.W. that the humanity aspect must be enlarged. A friendly attitude among the students is naturally one of the most sought for in a situation such as the present one.

"But how can these objectives be gained under the present set-up?" one is bound to ask. The answer to this problem is not simple. There is much that we can do as individuals to help solve the problem. Let us put ourselves mentally, physically, and spiritually, to the grind and give our "deepest". Take part in social and extra-curricular activities. They are as much a part of your education as physics and mathematics. You will find your answer by joining one of the engineering societies and by engaging in school activities.

We must now imagine ourselves in a position that we must hold at all costs, as though it were involving our fortunes, our honor, and our future happiness, for in reality it does! Yes, the final graph of the Engineering School, on which each of us helps to plot points as individuals, must and will lead to the curve of perfection.

## A E E CONFERENCE

On October 26, 1946, George Kalv and Alfred Barauk visited the District Conference of the A.I.E.E. at Penn. State. The most absorbing item of the program was a general tour of the school's laboratories. "More Active Student Participation" and "What Industry Expects of the Electrical Engineering Graduate" were the main themes of the conference. It was further stressed that more non-technical sessions, such as dances and dinners, should be included in the year's program. Among the speakers were Dr. J. F. Calvert, National Chairman of the Student Activities, and Mr. C. A. Powell, past president of the A.I.E.E.

## DEAN'S COLUMN

Size has its problems. In common with all colleges of engineering, enrollment is greatly increased in our college to more than twice the peak of pre-war years. Many of the physical annoyances of crowded classes and over-worked laboratory facilities will be corrected by next semester. New instructors and new facilities can be found. These depend on the University administration and are its responsibility.

There is a problem of size, however, in which our very much enlarged student body can help, the problem of getting acquainted. The School of Engineering of the George Washington University has maintained a fine school spirit. Students, alumni and faculty have worked together in getting an education. With classes of 50 to 55 instead of 10 to 15 and with certain classes running even larger, 250 to 300, unless we work at it, we shall lose this comradeship in education which has been an outstanding quality of our campus life.

The engineering fraternities, the student engineering society chapters, the Engineers' Council's activities, the "Lounge", and the "Mecheleciv" are all instruments of acquaintance-ships.

To all new comers we give a welcome and hope that each will find in this institution the gift of friendship which is the basis of a happy life.

—Dean Feiker

## THE RADIO ENGINEER

"A Radio Engineer is a person who passes as an exacting expert on the basis of being able to turn out with prolific fortitude infinite strings of incomprehensible formulae calculated with micromatic precision from vague assumptions which are based on debatable figures taken from inconclusive experiments carried out with instruments of problematical accuracy by persons of doubtful reliability and questionable mentality for the avowed purpose of annoying and confounding a hopelessly chimerical group of esoteric fanatics referred to altogether too frequently as practical radiomen."

## KEEPING ALLIANCE WITH SCIENCE

This column hopes to achieve a worthwhile end in featuring educational and informational highlights in the realm of science and engineering. It is altogether fitting in this opening issue, to review the story of one of the most important and least publicized national groups, that performed so meritoriously during the war, the National Inventors' Council.

The NIC was set up by the Secretary of Commerce during the war years, under the Chairmanship of Charles F. Kettinger, to screen the numerous public ideas submitted, in search of valuable inventions to aid the armed forces during the war. Similar in organization to the Naval Consultory Board of the first World War, the NIC received about 280,000 ideas and accepted 80 of these. The Naval Consultory Board adopted only two ideas. One of these two ideas was a sonic method of detecting submarines under water.

Prominent on this Board of dollar-a-year men, was Dean Frederick M. Feiker, who headed the division reviewing ideas for improvements in construction. Of the thousands of ideas received in this division, the most important was that of using landing mats for temporary roadways. Other important ideas were plans for tent construction, and a combination crane-trailer truck to lay spans for a 40 foot bridge. The latter was put into operation at Port Belvoir, Va.

Heading the division for medical ideas was Watson Davis, alumnus.

The work of the NIC was little known during the war years because of a heavy military censorship. It is not surprising to hear that only 80 of the ideas were finally accepted, when we consider that the vast majority of ideas were either impracticable, uneconomical, or fantastic as the yarns brewed up by second-rate science-fiction magazine writers. Such was the idea for a hidden airplane landing field buoyed high up in the sky by immense floating balloons. Yet one of the most valuable ideas was extremely simple in design; merely a square mirror with a small hole through the center used for signaling. The hole was to aid the user in following the line of motion of a distant object and at the same time, signal to it. This mirror, with instructions written on the back, eventually became part of the equipment of every man in the Signal Corps.

Next issue, the writer hopes to review a book that has created a minor stir in the scientific world. It is in connection with the OGRD. Can you guess the name of it?

## ENGINEERS ARE PEOPLE

That a night student with a full day-time job can be active in extra-curricular activities is graphically proved by cheerful, stocky, Felix Geissler, Engineer's Council secretary and Theta Tau treasurer. The thirty-four year old father is also member of the A.S.C.E. He maintains a 3.4 average.

Married for ten years, he daily commutes by street-car and bus from his home in Bethesda, Md. to his job at the Public Roads Administration and to classes.

To graduate in June after a three year course with a B.S.E. degree in Statistical Engineering, Felix will use his newly learned material in conjunction with his present work of long range planning and programming of public roads.

Born in Ithaca, N.Y., where his father was Professor of Psychology at Cornell University, he moved with his family to Virginia in 1920.

Starting his collegiate work at V.P. I., he graduated from Lynchburg College in 1935 with an A.B. in mathematics sheepskin in his pocket. Working for his masters degree at the University of Virginia, he was forced by financial difficulties to quit one thesis short of the degree. While there as a graduate student, he served as student instructor in mathematics.

A half year as teacher at a Lynchburg public school convinced him that he could do better in another field, so, for two years, he worked as surveyor and general engineer. He then turned to his present work, traffic engineering, at the Virginia Highway Department.

In 1940, as construction engineer for the Navy, he supervised the construction of the Photo Science Laboratory at the Anacostia Naval Air Station, and was inspector of the Naval Hospital Tower at Bethesda, Md.

After V-J Day, he was transferred to his present post at the Public Roads Administration.

With whatever time that remains after studying for his twelve hour schedule, Felix has used his woodworking hobby to make household furniture. One of his projects is furnishing the nursery of his eight month old son, Fred.



## Short Circuits



Stop, EE! Drop that slide rule! It is of vital importance to the electrical engineering student that he avail himself of all the opportunities to develop into an engineer worthy to assume the responsibilities of the scientific field.

It was for this purpose that the AIEE student branch was organized at GW. Join the local EE society, obtain student membership in the national organization, reserve the first Wednesday night of every month for attendance and active participation.

And for you interested in IRE, there is a faint glimmer of hope, for plans are being made for your membership in the national IRE and attendance at joint meetings with the AIEE chapter.

With the large EE enrollment and the interest in membership manifested at the short meeting in October, the prospects are brighter than at any time in the past.

COMING ATTRACTIONS: You will hear some of the foremost men of the electrical field speak on our current subjects in your language, enjoy social intercourse with your fellow engineers and engineering professors, attend the planned parties and field trips.

For the November meeting, Dr. H. B. Brooks, recently retired from the Bureau of Standards, designer of the Brooks depletion potentiometer, will speak from experience on, "The Early History of the Distribution of Electrical Energy."

For any information on your EE society, contact one of the following officers:

Clifton Williamson - Chairman  
Miss Bernadine L. Dunfee - Vice-Chm.  
Miss Marjorie Rhodes - Sec'y-Treas.

This is your society!

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## BOLTS, VOLTS AND JOLTS

We're supposed to have an original column of humor this time—none of Joe Miller's warmed-over left-overs. What shall we use for jokes, then?

Well, take my brother-in-law—he's a joke! I can't describe him very well. I don't even know how tall he is—I've never seen him standing up. I can't say he's really lazy, though, 'cause he has at least one ambition. He wants to fill the Grand Canyon with empty beer cans. I think his second ambition is to make me pay for the beer!

I heard about a guy who was even lazier than him, though. This guy was asleep up in a big oak tree. The local yokels called him the laziest feller in town. Seems he had fallen asleep on an acorn 55 years ago!

I finally found a place to stay. It's just a room with an adjoining towel. I got into bed and when I closed the door, the doorknob got into bed with me....

## F. A. HOWARD

Con't from page 1

Vice-President, Standard Oil Co.

President and director, Standard Oil Development Co.

President and director, Standard Oil Catalytic Co.

President and director of the Hydro Patent Co.

President and director, Hydraulic Engineering and Chemical Co.

He is a member of the American Patent Law Association, American Petroleum Institute and Sigma Nu social fraternity.

Mr. Howard has been active in recent years promoting endowments for the Cancer Institute of America. He is now actively engaged in raising funds for the George Washington School of Engineering. Mr. Howard has donated \$5,000 for the purpose of founding a lecture-ship to interest student engineers in the field of research at \$500 per lecture. The first lecture of the series was conducted last fall when Dr. E. V. Condon of the Bureau of Standards gave a very interesting talk on the effects of atomic energy in the field of research and its effect upon our everyday living.

The School of Engineering and the University feel proud of the accomplishments of one of its alumni.

The School of Engineering and the University feel proud of the accomplishments of one of its alumni.

Customer:- "I want a man's comb."

Salesman:- "Do you want a narrow man's comb?"

Customer:- "No, I want a comb for a stout man with rubber teeth."



Permit us to brag. We have the largest and the most promising M. E. society the university has ever known. Our membership is approaching the one hundred mark and seems likely to keep increasing. Here is an invitation to ME's; join the ASME for an active and profitable year.

What will you get from the three dollars you pay for the first year's dues? Twelve issues of the Mechanical Engineering magazine, the A.S.M.E. pin, monthly inspection trips, which include the Christian Heurich Brewing Company (bring your own bottle, please), the Naval Gun Factory, the David W. Taylor Model Basin, the technical laboratories of the F.B.I., and the maintenance shops of the Capital Transit Company. Each meeting will feature either sound film, technical or entertaining guest speakers. Each meeting will be topped by refreshments. Last but not least, the A.S.M.E. is planning a party tentatively scheduled for Saturday night, Dec. 7th. A second annual party following the Engineers Banquet is also planned.

As engineering students we should begin the right way by talking, thinking, and acting like engineers. The first act is to belong, know your fellow ME's and join us once a month for a few hours of good fellowship mixed with engineering interest.

The officers for the current year are:  
President—Ben Sorin  
Vice President—Frank Weatherly  
Secretary—Nancy Larsen  
Treasurer—Elmer Sunday  
Council Members—Robert Kemelhor  
David Johnson

The first meeting of the year is Wednesday night, November 6. Look for our bulletins indicating the place. We cordially invite all of you to attend.

GOOD THINGS TO EAT

LEO'S  
DELICATESSEN

2133 G. St., N.W.

Next to Sorority Hall

## MEET YOUR PROFESSOR

"Go east, young man—go east", must be the motto of Professor B. A. Green-shields.

Although he was born in Kansas, he grew up in Oklahoma.

Professor Green-shields entered Oklahoma University in 1916. He later left college to serve in the Air Force for a year, later returning to graduate in 1920 with Bachelor of Science and Civil Engineer degrees.

At the age of 20 he accepted the principalship of a high school. Deciding to use his engineering training, he later accepted the position of roadman for the Santa Fe Railroad. Professor Green-shields worked at this job until he was offered a position of teaching at Marquette. The next year, he changed positions to that of teaching civil engineering at Virginia Polytechnic Institute.

In 1926 he became head professor of the engineering department at Denison University. It was at this university that Professor Green-shields did much work on low cost housing under the John C. Porce Low Cost Housing Research Fund. Then came the start of the home planning courses. He worked at this until 1929 when he began his work in the field in which he is most well-known—that of Traffic Engineer. Professor Green-shields realized at this time that highways in the past were always built from the mechanical viewpoint without considering the actual needs of the driver, such as reflexes and visibility. It was at this time that he decided that he should "have a few more degrees". He then obtained his Master of Science and Doctor of Philosophy degrees in Civil Engineering Highway Transportation at the University of Michigan. In 1937, Professor Green-shields accepted the position of Assistant Professor at City College of New York. He remained there until 1940 when he accepted a position with the Brooklyn Polytechnic Institute.

In 1944, he was presented an opportunity to conduct research of traffic at the Yale Bureau of Highway Traffic. During his research, he introduced numerous new methods in the field of traffic engineering such as traffic flow survey from the air. The fall and summer of 1945 were then spent at New York University.

Professor Green-shields accepted the position of Assistant Professor of Civil Engineering at George Washington University this semester. At the present, his family is living in Texas.

Professor Green-shields described George Washington University as being a cosmopolitan college, a sort of happy medium between a city and an out of town college. As for societies, engineers take note—he is a member of Sigma Xi, Sigma Tau, Iota Alpha, and A.C.C.

His favorite sport is golf. He likes to work with photography and play bridge, at which he is an expert.



# SIGMA TAU

## Important Notice:

Xi Chapter welcomes back all Sigma Taus who have returned from the service.

Will those who have not been notified of the meetings please leave a note in Dean Feiker's office addressed to Sigma Tau, giving their names and addresses.

## Engineering Library

A major topic of discussion at the last meeting was the serious inadequacy of library facilities at school for the engineers. All who, in previous years, have tried to obtain reference books or technical magazines in Lisner Library know of what we speak. The greatly increased enrollment has made the situation impossible.

Sigma Tau has under discussion a project for expanding library facilities for the Engineering School. This project centers about an "Engineers' Reference Room", to be set aside in Lisner Hall, whose shelves will be stacked with handbooks, textbooks, and recently published works of recognized authorities, in addition to all periodicals and magazines pertaining to engineering.

# THETA TAU

Gamma Beta Chapter, Theta Tau Fraternity, is indeed fortunate in having so many of its old members returned from the services to take up again their duties as actives. Gamma Beta welcomes you back with the request that you cooperate to the best of your ability to make our fraternity one of the most active on the campus.

Hal Thomasson, one of our present actives just returned from the service, had a pleasant surprise the weekend of the 19th. It seems that Hal's present interest flew down from Boston, arriving in Washington about two A.M. Hal starts his duties as radio engineer for WOL at five in the morning and as a result of his early morning awakening, he didn't get his usual shut-eye.

Bob Weston, one of the Alumni, has been seen escorting a most luscious blond.

Continued on page 6

## INQUIRING REPORTER

The question asked this week was "What do you think of your lounge?" It was asked last Tuesday during the noon hour in the lounge. Here are some of the novel replies.

G. E. Boggs, Junior EE--

The lounge is too small. There is not enough room to study.

D. R. Davidson, Freshman EE--

I can't see any use of a map of France on the wall. It should be replaced by some good pin-up pictures.

J. T. White, Freshman EE--

The lounge needs many things such as ashtrays, chairs, lamps, better ventilation and last, the skylight should be cleaned.

A. C. Brown, Junior ME--

This lounge was good enough for our fourfathers, but then four people don't take up as much room as five hundred freshmen.

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## THETA TAU

Continued from page 5

Mickey Schulte is back in school again, having just returned from the service with his chest out and his head high, bragging about his first offspring.

Nick Toffalo is back in school, not satisfied with an E.E. degree, has decided to be a physicist. Good luck, Nick, more power to you.

George Kalv, having just returned from the service, is going full blast toward a degree and is instructing on the side. George has pitched in and done a swell job for the active chapter to date. So has Dick Fenton. Dick has been acting as Scribe as the elected Scribe has more duties than would permit him to do the job he wanted. Keep at it, Dick.

It is a public fact that Frank Mitchell of the alumni is to be married to Miss Laura Elizabeth Wells at the Metropolitan Memorial Church at 4:50, Nov. 2. The active chapter wishes the newly-weds the best of everything.

Enough chatter. Let's get down to the future. The Chapter has plans for not less than two pledge parties this Fall, one of which will possibly be at Twin Oaks. It looks like another active year for Gamma Beta.



Again this year, as in other years, the student chapter of the American Society of Civil Engineers finds itself with the smallest membership of all the societies. Not out to break any precedent, our group believes that the present size of membership is conducive to the ease and flexibility of operation desired in the promotion of greater understanding of engineering principles and the convivial relationships which exist in any progressive undergraduate body.

We feel fortunate in retaining Assistant Dean Carl H. Walther as our advisor. His guidance again attaches significant importance to the society's functions.

As a start toward the seasons activities, student members were invited to hear Mr. John H. Atanoff, of the Naval Research Division, who spoke at the Cosmos Club October 22 on "Some Technical Aspects of Bixini".

The chapter's projected program includes prominent speakers, sound movies, inspection trips, and an evening with our attested informality, a few stag functions.

A.S.C.E. members attend the first regular meeting on November 6, at 6:30 p.m.

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